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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,677	01/27/2004	Naoyuki Nishikawa	B422-251	3038

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EXAMINER

NGUYEN, ALLEN H

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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04/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/766,677	Applicant(s) NISHIKAWA, NAOYUKI	
	Examiner Allen H. Nguyen	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- This office action is responsive to the following communication:
Amendment filed on 12/19/2008.
- Claims 1-9 are currently pending in the application.

Response to Arguments

1. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-4, 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (US 5,287,194) in view of Hanson (US 6,148,346).

Regarding claim 1, Lobiondo '194 discloses a remote printing server (Print server 60, fig. 1) which receives data from a client computer (Workstation 30, fig. 1) via a local network (Communication link 20 / LAN, fig. 1) and sends data over a network so as to print the data on a remote printer (Printers 10, fig. 1), comprising:

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print response means (Scheduler 50, fig. 1) for performing a print control protocol (i.e., the scheduler 50 is responsive to the capability and availability of each printer 10 on the network; see col. 3, lines 64-67) so that the client computer (Workstation 30, fig. 1) can recognize said remote printing server (Print server 60, fig. 1) as a local printer (Printers 10, fig. 1) in the local network (i.e., the network can be a LAN; see col. 3, lines 20-25, fig. 1), receiving print data from the client computer and generating a print job for performing a response process when the data is printed (i.e., a user at one of the workstations 30 of the network enters a request to print a job, sends the print job data to a network print spooler 60, and enters all necessary criteria which is stored in an input data file in memory; see col. 3, lines 55-60, fig. 1);

spooling means (Print Spooler, fig. 3) for spooling the print job generated by said print response means (i.e., the print job data can be input into the system and sent to a common print spooler 60. Upon analysis of available printers and the entered criteria, the scheduler 50 schedules one or more printers 10 for printing of the job; see col. 6, lines 25-35, fig. 3), informing the client computer of a completion of a print process in the local network, and generating a print completion job (i.e., the scheduling routine utilizes the total complex of printers available at local location and/or remote locations to allocate and complete printer jobs based on a plurality of criteria, including requested completion time for the project; see Abstract and col. 6, lines 10-17);

transferring data conversion means (a Network print spooler 60, col. 3, lines 55-60) for converting the print completion job generated by said spooling means into a format in which the job can be transferred to the remote printer over the network (A user

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at one of the workstations 30 of the network enters a request to print a job, sends the print job data to a network print spooler 60, and enters all necessary criteria which is stored in an input data file in memory. Depending on the type of data to be printed, i.e., facsimile, E-mail transfer, copy, etc., the criteria that needs to be entered for each job can vary; see col. 3, lines 55-65 and col. 6, lines 20-30);

remote transfer means (The Schedule 50, fig. 3) for transferring the print completion job converted into a transferable format by said transferring data conversion means to the remote printer (Printers 10, fig. 1) over the network (Communication link 20 / LAN, fig. 1) using a predetermined transfer protocol (i.e., the printshop scheduler 50 can schedule and distribute a large job, which may require the use of multiple printers 10 for a single job, among a plurality of local and remote printers 10 attached to the network; see col. 4, lines 15-20 and col. 5, lines 35-45).

Lobiondo '194 does not explicitly show a remote printing server which receives data from a client computer via a local network and sends data over a global network so as to print the data on a remote printer which does not exist in the local network.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Hanson '346. In particular, Hanson '346 teaches a remote printing server (WWW Server, fig. 1) which receives data from a client computer (PC 23, fig. 1) via a local network (Company A Local Net 20, fig. 1) and sends data over a global network (Internet 22, fig. 1) so as to print the data on a remote printer (WWW attached Printers 36, fig. 1) which does not exist in the local network (i.e., a user is operating from a Windows 3.1 PC 23, the dynamic device driver 42 allows communication with

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peripherals directly attached, such as a printer 27, peripherals connected on an intranet network 20, such as printers 29-31, or peripherals connected on the Internet 22, such as printer 36; see col. 4, lines 10-20, fig. 1).

In view of the above, having the system of Lobiondo and then given the well-established teaching of Hanson, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Lobiondo as taught by Hanson to include: a remote printing server which receives data from a client computer via a local network and sends data over a global network so as to print the data on a remote printer which does not exist in the local network, since Hanson stated in col. 1, lines 5-10 that such a modification would ensure the field of data processing and, more particularly, to an improved dynamic device driver that provides communication between various devices and various operating systems across various types of networking systems.

Regarding claim 3, Lobiondo '194 does not explicitly show the remote printing server, further comprising: selection means for selecting a transfer protocol for remote transfer of the data.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Hanson '346. In particular, Hanson '346 teaches the remote printing server (Server 57, fig. 2), further comprising:

selection means (i.e., FTPping, col. 3, line 33) for selecting a transfer protocol for remote transfer of the data (i.e., file transfer protocol sending or FTPping of various

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documents, such as Excel, Word, MacWrite, etc., to a peripheral device for execution; see col. 3, lines 30-35).

In view of the above, having the system of Lobiondo and then given the well-established teaching of Hanson, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Lobiondo as taught by Hanson to include: the remote printing server, further comprising: selection means for selecting a transfer protocol for remote transfer of the data, since Hanson stated in col. 1, lines 5-10 that such a modification would ensure the field of data processing and, more particularly, to an improved dynamic device driver that provides communication between various devices and various operating systems across various types of networking systems.

Regarding claim 4, Lobiondo '194 does not explicitly show the remote printing server, wherein said remote transfer means uses a file transfer protocol or a mail distribution protocol.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Hanson '346. In particular, Hanson '346 teaches the remote printing server (Server 57, fig. 2), wherein said remote transfer means (i.e., FTPping, col. 3, line 33) uses a file transfer protocol (i.e., file transfer protocol sending or FTPping of various documents, such as Excel, Word, MacWrite, etc., to a peripheral device for execution; see col. 3, lines 30-35) or a mail distribution protocol.

In view of the above, having the system of Lobiondo and then given the well-established teaching of Hanson, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Lobiondo as taught by Hanson to include: the remote printing server, wherein said remote transfer means uses a file transfer protocol or a mail distribution protocol, since Hanson stated in col. 1, lines 5-10 that such a modification would ensure the field of data processing and, more particularly, to an improved dynamic device driver that provides communication between various devices and various operating systems across various types of networking systems.

Regarding claim 6, Lobiondo '194 discloses the remote printing server (Print server 60, fig. 1), further comprising:

transfer control means (Schedule 50, fig. 1) for controlling a transfer parameter setting file (printing parameters, col. 6, lines 54-55) and said remote transfer means by referring to the transfer parameter setting file (i.e., the scheduler 50 then examines the printer queue (step 430) and determines if the printer can complete the job by the required time (step 440). If the job can be completed on time the job is allocated to the printer (step 450). The user is then informed of the job schedule (step 460). If the printer cannot complete the job by the required time, the amount of the job that can be completed on time is determined (step 415); see col. 6, lines 55-65, fig. 4).

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Regarding claim 7, Lobiondo '194 discloses a remote print system (Fig. 1), comprising: the remote printing server (Print Server 60, fig. 1) and the remote printer (Printers 10, fig. 1).

Regarding claim 8, claim 8 is the method claim of device claim 1. Therefore, method claim 8 is rejected for the reason given in device claim 1.

Regarding claim 9, Lobiondo '194 discloses a computer-readable storage medium storing a program used to direct a computer to use as a remote printing server (i.e., the information, which contains criteria for printing the job, can be sent to and temporarily stored in a buffer, RAM or other storage means located within a print server 60 or associated with the network and accessible by the print server 60; see col. 3, lines 35-45, fig. 1) for receiving data from a client computer (Workstation 30, fig. 1) and for sending data over a network (Communication link 20 / LAN, fig. 1) so as to print the data on a remote printer (Printers 10, fig. 1), comprising:

a print response step (Scheduler 50, fig. 1) of performing a print control protocol (i.e., the scheduler 50 is responsive to the capability and availability of each printer 10 on the network; see col. 3, lines 64-67) so that the client computer (Workstation 30, fig. 1) can recognize said remote printing server (Print server 60, fig. 1) as a local printer (Printers 10, fig. 1) in the local network (i.e., the network can be a LAN; see col. 3, lines 20-25, fig. 1), receiving print data from the client computer and generating a print job for performing a response process when the data is printed (i.e., a user at one of the

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workstations 30 of the network enters a request to print a job, sends the print job data to a network print spooler 60, and enters all necessary criteria which is stored in an input data file in memory; see col. 3, lines 55-60, fig. 1);

a spooling step (Print Spooler, fig. 3) of spooling the print job generated in said print response step (i.e., the print job data can be input into the system and sent to a common print spooler 60. Upon analysis of available printers and the entered criteria, the scheduler 50 schedules one or more printers 10 for printing of the job; see col. 6, lines 25-35, fig. 3), informing the client computer of a completion of a print process in the local network, and generating a print completion job (i.e., the scheduling routine utilizes the total complex of printers available at local location and/or remote locations to allocate and complete printer jobs based on a plurality of criteria, including requested completion time for the project; see Abstract and col. 6, lines 10-17);

a transferring data conversion step (a Network print spooler 60, col. 3, lines 55-60) of converting the print completion job generated in said spooling step into a format in which the job can be transferred to the remote printer over the network (A user at one of the workstations 30 of the network enters a request to print a job, sends the print job data to a network print spooler 60, and enters all necessary criteria which is stored in an input data file in memory. Depending on the type of data to be printed, i.e., facsimile, E-mail transfer, copy, etc., the criteria that needs to be entered for each job can vary; see col. 3, lines 55-65 and col. 6, lines 20-30);

a remote transfer step (The Schedule 50, fig. 3) of transferring the print completion job converted into a transferable format in said transferring data conversion

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step to the remote printer (Printers 10, fig. 1) over the network (Communication link 20 / LAN, fig. 1) using a predetermined transfer protocol (i.e., the printshop scheduler 50 can schedule and distribute a large job, which may require the use of multiple printers 10 for a single job, among a plurality of local and remote printers 10 attached to the network; see col. 4, lines 15-20 and col. 5, lines 35-45).

Lobiondo '194 does not explicitly show a remote printing server for receiving data from a client computer via a local network and sends data over a global network so as to print the data on a remote printer which does not exist in the local network.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Hanson '346. In particular, Hanson '346 teaches a remote printing server (WWW Server, fig. 1) for receiveing data from a client computer (PC 23, fig. 1) via a local network (Company A Local Net 20, fig. 1) and sends data over a global network (Internet 22, fig. 1) so as to print the data on a remote printer (WWW attached Printers 36, fig. 1) which does not exist in the local network (i.e., a user is operating from a Windows 3.1 PC 23, the dynamic device driver 42 allows communication with peripherals directly attached, such as a printer 27, peripherals connected on an intranet network 20, such as printers 29-31, or peripherals connected on the Internet 22, such as printer 36; see col. 4, lines 10-20, fig. 1).

In view of the above, having the system of Lobiondo and then given the well-established teaching of Hanson, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Lobiondo as taught by Hanson to include: a remote printing server for receiving data from a client

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computer via a local network and sends data over a global network so as to print the data on a remote printer which does not exist in the local network, since Hanson stated in col. 1, lines 5-10 that such a modification would ensure the field of data processing and, more particularly, to an improved dynamic device driver that provides communication between various devices and various operating systems across various types of networking systems.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (US 5,287,194) in view of Hanson (US 6,148,346) and further in view of Kitagawa et al. (US 5,799,206).

Regarding claim 2, the combination of Lobiondo '194 and Hanson '346 does not explicitly show the remote printing server, further comprising:

recovery means for performing a recovery process on the print completion job transferred by said remote transfer means as necessary.

However, the above-mentioned claimed limitation is well known in the art as evidenced by Kitagawa '206. In particular, Kitagawa '206 teaches recovery means (i.e., detected contents; see col. 3, lines 1-5) for performing a recovery process on the print completion job transferred by said remote transfer means as necessary (i.e., the host computer can check the status of the printer by utilizing the detected contents which is set in the polling response data unit and in the event that normal printing is not carried

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out, it can inform the user of host computer 110 of a cause of an error and conduct the error recovery processing such as re-sending of a print job; see col. 3, lines 5-15).

In view of the above, having the combination system of Lobiondo and Hanson and then given the well-established teaching of Kitagawa, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Lobiondo and Hanson as taught by Kitagawa to include: recovery means for performing a recovery process on the print completion job transferred by said remote transfer means as necessary, since Kitagawa stated in col. 1, lines 10-15 that such a modification would ensure the host computers are capable of recognizing the status of the network printer and control the operation thereof and to a computer used in the remote print system.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (US 5,287,194) in view of Hanson (US 6,148,346), and further in view of Ogishima (US 2002/0083001).

Regarding claim 5, the combination of Lobiondo '194 and Hanson '346 does not explicitly show the remote printing server, further comprising: encipher means for enciphering the print completion job transferred by said remote transfer means.

However, the above-mentioned claimed limitation is well known in the art as evidenced by Ogishima '001. In particular, Ogishima '001 teaches the remote printing server (12, fig. 3), further comprising: encipher means for enciphering the print

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completion job transferred by said remote transfer means (i.e., a transmitting step enciphering requested data in the server and transmitting enciphered data via a network, a deciphering step receiving and deciphering the enciphered data in an apparatus which at least has a printing function; see page 2, paragraph [0019], fig. 3).

In view of the above, having the system of Lobiondo and Hanson and then given the well-established teaching of Ogishima, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Lobiondo and Hanson as taught by Ogishima to include: The remote printing server, further comprising: encipher means for enciphering the print completion job transferred by said remote transfer means, since Ogishima stated on page 1, paragraph [0007] that such a modification would ensure various enciphering systems have been proposed to prevent copying of the digital data, by enciphering the digital data before transmission at the transmitting end and deciphering the enciphered digital data at the receiving end.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Davidson Jr. et al. (US 5,550,957) discloses multiple virtual printer network interfaces.

Morgan et al. (US 5,220,674) discloses local area print server for requesting and storing required resource data and forwarding printer status message to selected destination.

Schroath et al. (US 2003/0218767) discloses explicit feedback for remote printing.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen H. Nguyen whose telephone number is (571)270-1229. The examiner can normally be reached on 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KING Y. POON can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/
Supervisory Patent Examiner, Art Unit 2625

/Allen H. Nguyen/
Examiner, Art Unit 2625